

What is claimed is:

1. A method for controlling and supervising an electronic device comprising one or more peripheral units through an apparatus comprising one or more controllers, said method comprising the steps of:

controlling each peripheral unit of the device by means of a controller of said one or more controllers;

identifying a plurality of data items which have to be handled in order to carry out control and supervision of the device; and

generating/receiving, through said one or more controllers, messages each message containing one or more of said data items to be handled,

wherein the method further comprises the step of connecting said controllers through a common bus, and wherein the format of said messages generated by/received from the controllers is pre-established and substantially independent of the size of data contained therein.

2. A method according to claim 1, wherein the step of identifying a plurality of data items which have to be handled comprises the step of arranging all data in storage registers, each register having the same size, each data item being univocally identified by an identifier of a register containing it and by an identifier that identifies a position of the data item inside the register itself.

3. A method according to claim 2, wherein it further comprises the step of identifying a subset of data arranged in registers, said data subset being composed of one or more registers and corresponding to data for control/supervision of a partially equipped device.

4. A method according to claim 1, wherein it further comprises the steps of:

providing a concentrator or supervision entity, said concentrator being connected to said one or more controllers by said common bus; and providing said concentrator with information concerning said data and their arrangement in registers.

5. A method according to claim 4, wherein the step of providing said concentrator with information concerning data comprises the steps of defining use relations between each data item and at least one controller, and specifying an information flow direction, namely a supervision entity producing or using said data item.

6. A method according to claim 5, wherein each controller validates only a pre-established part of message, in accordance with the corresponding use relation.

7. A method according to claim 1, wherein it further comprises a step of providing each of the controllers with a computer software program, said software program comprising: a first control module, which is the same for all the controllers and independent of the handled data; a second processing module for each single data item and which is usable in any controller that handles such a data item; and a platform module which is the same for all the hardware of the same type, capable of driving the peripheral units.

8. A method according to claim 1, wherein it further comprises a step of disconnecting said concentrator once a start up step is finished.

9. A method according to any of the preceding claims, wherein said device is a device for receiving, transmitting and processing signals in radio relay systems.

10. An apparatus for controlling and supervising, through the handling of a plurality of data items, an electronic device, the device comprising one or more peripheral units, the apparatus comprising:

one or more controllers, each peripheral unit being controlled through a controller; and

means for generating/receiving, through said controllers, messages each containing one or more of said data items to be handled,

wherein it further comprises a common bus for connecting said controllers together, and wherein the format of said messages generated/received by the controllers is pre-established and substantially independent of the size of data contained therein.

11. An apparatus according to claim 10, wherein it further comprises storage registers for storing therein the data items to be handled, each register having the same size, each data item being univocally identified by an identifier of the register containing it and by an interval identifying the position of the data item inside the register itself.

12. An apparatus according to claim 10, wherein it further comprises a concentrator or supervision entity connected to the controllers via a common bus, said concentrator receiving information concerning said data and their arrangement in registers.

13. An apparatus according to claim 10, wherein each controller comprises a computer software program, said software program comprising: a first control module, with the first module being the same for all the controllers and unrelated to the handled data; a second processing module for each single data item and which is usable in any controller handling such a data item; and a platform module, with said platform module being the same for hardware of the same type, capable of driving the peripheral units.

14. An apparatus according to claim 10, wherein said device to be controlled/supervised is a device for receiving/transmitting and processing signals in radio relay systems.

15. A computer software program comprising program code means designed to carry out one or more of the steps of claims 1 to 9 when said program is run on a computer.

16. A computer-readable medium having a computer software program recorded thereon, said computer-readable medium comprising program code means designed to carry out one or more of the steps of claims 1 to 9 when said program is run on a computer.

17. A computer-readable medium having a computer software program recorded thereon, said computer-readable medium comprising program code means designed to carry out one or more of the steps of claims 1 to 9 when said program is run on a computer.